

ABSTRACT OF THE DISCLOSURE

An interface device for use with a computer that provides locative data to a computer for tracking a user manipulatable physical object and provides feedback to the user through output forces. The physical object is movable in multiple degrees of freedom and is tracked by sensors for sensing the location and orientation of the object. A device processor can be responsive to the output of the sensors and can provide the host computer with information derived from the sensors. The host computer can provide images on a display, where the computer responds to the provided sensor information and force feedback is correlated with the displayed images via force feedback commands from the host computer.